

Listing of Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Original) A method for manufacturing a mask for integrated circuit devices, the method comprising:

providing a quartz substrate having a surface, the quartz substrate comprising a thickness;

forming a MoSi film overlying the surface of the quartz substrate;

patterning the MoSi film overlying the quartz substrate to form a mask pattern;

and

forming an opaque edge structure comprising a carbon bearing material on a portion of the surface around a peripheral region of the mask pattern; whereupon the opaque edge structure has a light transmittance ranging from about 0% to about 3%.

2. (Original) The method of claim 1 wherein the forming of the opaque edge structure is provided by laser deposition.

3. (Original) The method of claim 1 wherein the forming of the opaque edge structure is provided by focused ion beam.

4. (Original) The method of claim 1 wherein the opaque edge structure occupies a region on the quartz substrate that is free from the mask pattern.

5. (Original) The method of claim 1 wherein the mask pattern is for a half tone phase shift mask.

6. (Original) The method of claim 1 further comprising cleaning the patterned MoSi film and opaque edge structure.

7. (Original) The method of claim 1 wherein the carbon is in a C12, C13, C14 state.

8. (Original) The method of claim 1 wherein the patterning of the MoSi film is a photolithography process.

9. (Original) The method of claim 8 wherein the patterning is the only photolithography process used by the method.

10. (Original) The method of claim 1 wherein the mask pattern is free from a chrome film.

11. (Original) A method for processing integrated circuit devices, the method comprising:

providing a mask structure, the mask structure comprising a quartz substrate having a surface, a patterned MoSi film overlying the surface of the quartz substrate to form a mask pattern, and an opaque edge structure comprising a carbon bearing material on a portion of the surface around a peripheral region of the mask pattern; and

using the mask structure for applying a pattern onto a photosensitive material overlying a semiconductor substrate.

12. (Original) The method of claim 11 wherein the mask structure is a mask.

13. (Original) The method of claim 11 wherein the carbon bearing material is in a C12, C13, C14 state.

14. (Original) The method of claim 11 wherein the forming of the opaque edge structure is provided by laser deposition.

15. (Original) The method of claim 11 wherein the forming of the opaque edge structure is provided by focused ion beam.

16. (Original) The method of claim 11 wherein the opaque edge structure occupies a region on the quartz substrate that is free from the mask pattern.

17. (Original) The method of claim 11 wherein the mask pattern is for a half tone phase shift mask.

18. (Original) The method of claim 11 further comprising cleaning the patterned MoSi film and opaque edge structure.

19-20. (Canceled)